



FAA-E-2286 - AMENDMENT 5  
October 1, 1974  
SUPERSEDING - AMEND.-4,  
3/27/69 & Changes 2, 3, 4,  
5, 6, 7, 8

## DEPARTMENT OF TRANSPORTATION

### FEDERAL AVIATION ADMINISTRATION

### SPECIFICATION .

COMPUTER DISPLAY CHANNEL (CDC)  
FOR  
THE NATIONAL AIRSPACE SYSTEM (NAS)

This amendment forms a part of FAA-2286 dated December 8, 1967.

Page 3, Paragraph 2.1: Add to the list of FAA Specifications:

FAA-E-2573 with Amendment 1	Electron Tube, Cathode Ray 23-inch, All Glass for Use in Computer Display Channel Plan View Display Console.
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FAA-E-2597	Electron Tube, Cathode Ray, 22-inch, Metal Cone for Use in Computer Display Channel Plan View Display Console.
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FAA-E-2298	Installation Kit Required to Fit a 22-inch Metal Cone Cathode Ray Tube in Computer Display Channel Plan View Display.
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Page 3, Paragraph 2.2: Add the following to the list of FAA Publications:

<u>"SPO-MD-108</u>	Computer Display Channel Class/Type Definitions and Console Control Legends dated October 1, 1970.
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Page 6, Paragraph 3.1.1.3: Delete the paragraph in its entirety and substitute:

"3.1.1.3 Sterile Area.- The term sterile area describes an area on the display surface which does not display radar data class and under specific conditions (3.6.17 as modified herein) line data class for a particular controller's area of responsibility. This area **will vary** between consoles and at each console depending upon the sector configuration in use."

Page 10, Paragraph 3.1.3.1: Delete the last sentence in the first paragraph and substitute the following:

"The design shall be sufficiently flexible so that any size system may be expanded on-line to a maximum size system with a maximum interruption of **service** of six hours. However, the maximum interruption of service shall be **only** three hours to expand any **size** system to the maximum size system configured for a single refresh memory subsystem. Changing from a single to a double refresh memory subsystem configuration shall require a maximum interruption of service of three hours, excluding time required **to** add on-line consoles."

Page 10, Paragraph 3.1.3.1: Add the following sentence to the second paragraph:

"There shall be no restriction as to how these ten displays are assigned to the one or the other or both of 'two refresh memory subsystems provided that the **CDC** is configured to operate **with** two. refresh memory subsystem and that both have the necessary redundant equipments available."

Page 11, Paragraph 3.2.2: Add the following sentence to the end of the paragraph :

"See FAA publication (Paragraph 2.2 herein) **SPO-MD-108** for present class/type definitions and console legend definitions."

Page 11, Paragraph 3.2.2.3: Delete the last sentence and substitute:

"Radar data and under specific conditions (3.6.17 as modified herein) line class data shall be inhibited from these portions of the sterile area used to display tabular **data**."

Page 12, Paragraph 3.2.2.4: Add the following sentence to the end of the first paragraph:

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The "m" and "n" parameters described above shall be easily changed via a simple software change. They shall initially be set at: "n"=3 and "m"=3 for the majority of the errors,

The transmission path between the display generation equipment and the Plan View Display may be checked by methods other than parity provided such checks result in appropriate signals indicating that maintenance action is required."

Page 47, Paragraph 3.6.13.1: Delete the last paragraph and substitute the following:

"The CCC message will include instruction bits in each full data block message which will designate which field or fields shall blink. If all bits are set, then all alphanumeric fields shall blink. A 'blink all fields' bit, if set, shall cause the entire block to blink, including the position symbol, the vector (if any) and the leader (if any)."

Page 47, Paragraph 3.6.13.3: Delete the third paragraph and substitute the following:

"If the combination of the one-minute vector specified by the computer message and the vector time control switch setting on the console results in a vector whose major axis is greater than  $1/4$  of the Display diameter (D), then the major axis shall be reduced to a length between  $1/4$  D and  $1/8$  D and the minor axis shall be reduced proportionally. The resultant vector shall have a special symbol placed at the end farthest from the position symbol."

Page 48, Paragraph 3.6.13.4: Delete the entire paragraph and substitute the following:

**3.6.13.4 Character Array Offset.** - The leader shall be drawn in the direction and to the length specified in the data block message control and filtering bytes.

The leader shall be drawn in one of eight evenly spaced directions with respect to the position symbols (N, S, E, W, NE, SE, SW, NW,). (See Figure 5a) The leader direction will be specified by the CCC using a three-bit binary tag contained in the data block, message. When leader directions, N, NE, E, SE, and S are specified, the leader shall be drawn from the position symbol to one character space to the left of the first character space of the

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for a Plan View Display to be installed at the **SMMC** position that will permit monitoring data which is being routed to other Plan View Displays. The Plan View Display at the **SMMC** position shall not include a position entry control (Paragraph 3.4.4) Plan View Display selection controls (Paragraphs 3.3.2, 3.3.3, 3.3.4), category/function controls (Paragraph 3.4.1), alpha-numeric keyboard (Paragraph 3.4.2), quick action panel (Paragraph 3.4.3), and CRT readout (Paragraph 3.10.3.2). Display controls (Paragraphs 3.3.5, 3.3.6) shall be provided. Failure keys (Paragraph 3.3.7) shall not be provided; however, the prime/TV mode switch shall be provided, and the requirements of Paragraph 3.2.8.2 shall be met. Display storage (Paragraph 3.6) shall not be provided for this display. Display center reference point controls (Paragraph 3.3.3) and display range selection controls (Paragraph 3.3.4) shall not be provided at this display and the requirements of Paragraphs 3.6.12.6 and 3.6.12.7 do not apply. Provision shall be made in the **CDC** to permit routing the same data to both the **SMMC** Plan View Display and the appropriate Plan View Display (Paragraph 3.6). An appropriate keyboard shall be provided at the **SMMC** Plan View Display to permit selecting for viewing the data being routed to any other Plan View Display. The data would then be routed to both the appropriate Plan View Display and the **SMMC** Plan View Display. The **SMMC** Plan View Display shall not interfere with or affect in any way the data presentation on the other Plan View Displays. The display performance requirements of Paragraph 3.2.4 shall apply to the **SMMC** Plan View Display."

Page 69: Add the following paragraph:

"3.8.7.1 Recovery After An AC Power Transient.- An AC Power transient that exceeds  $\pm 10\%$  of the normal line voltage shall not be considered a power failure unless the duration of the transient time exceeds the time as defined below:

The **CDC** shall continue in normal operation when an AC power transient causes the voltage at the AC source to decrease to less than 90% of normal voltage for 8 milliseconds or less. However, in the case when the AC voltage is 90 to 95% of normal immediately prior to an AC power transient, the **CDC** shall continue in normal operation when the AC power transient causes the voltage at the AC source to decrease to less than 90% of normal voltage for 4 milliseconds or less. The **CDC** shall continue in normal operation when the AC power transient causes the voltage at the AC source to increase to more than 110% of normal but

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"All cabinets in the equipment room shall be designed for the same height."

Page 82, Paragraph 3.15.1: In the 38th and 41st lines of the paragraph,

"84" and "30" and substitute: "90" and "42", respectively.

Page 83, Paragraph 3.15.1: Delete the following sentence contained in the fourth and fifth lines:

"Shield lights for general illumination of the cabinet interiors shall be provided behind the access doors. Each light shall have an ON-OFF switch."

Page 83, Paragraph 3.15.1: In the sixth to eighth lines delete: "Convenience twin outlets equal to Hubbel Catalog Number 5252 shall be provided on the front and rear of each cabinet for 120 volt AC test equipment, soldering irons, etc." and substitute the following therefore:

"Convenience outlets shall be provided in the front and rear of each cabinet. Two (2) outlets at the front and two (2) at the rear shall be provided for 120 volt AC test equipment, soldering irons; etc. A separate outlet at the front and a separate outlet at the rear shall be provided for the CDC test cart. The latter two separate outlets shall be suitably color coded to differentiate them from the standard outlets and shall be powered by a separate service. All outlets shall be of the "Plug Mold" type and shall be mounted between the doors and air intakes. Power wiring for these outlets in each cabinet shall enter through the top of the cabinet and shall be carried in a suitable shield inside the cabinet. The RFI integrity of the system shall not be derogated by this method of installation."

Page 83, Paragraph 3.15.1.1: In the eleventh line, delete "...between 10 and 17 units...." and substitute the following therefore:

"...between 5 and 17 units...."

Page 83, Paragraph 3.15.1.2.1: Delete the paragraph and substitute the following:

"3.15.1.2.1 Audible Noise for Console Located CDC Equipment, -

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Page 83, Paragraph 3.15.1.2.1: Delete the paragraph and substitute the following:

"3.15.1.2.1 Audible Noise for Console Located CDC Equipment,-

3.21.1 paragraph 3.7.5: Add the following sentence as a new subparagraph:

"Specific authorization is given to use thick film microelectronic modules of demonstrated reliability, in accordance with Raytheon specification control drawing 450003, in the CDC-PVD character/vector generators."

3.21.2 paragraph 3.7.6:

The requirement for accessibility as specified in this paragraph (3.7.6 Accessibility) is waived for the AC/DC Converter located in the air plenum of the CUE equipment cabinets.

3.21.3 paragraph 3.7.6:

'In the case of the CUE/NCRD, it is allowable, when removing the Video Preamplifier Board, to first remove the Low Voltage Power Supply,'

3.21.4 paragraph 3.7.7: Add the following new sentence as a new subparagraph:

"The requirement of this paragraph shall apply to the replacement of a complete Standard Raytheon Computer Core Memory's System with a complete Ampex Core Memory System. However, the interchangeability of the major assemblies (i.e., memory unit or power supply) between the two system shall not be required provided no physical or electrical damage can result because of the mixing of the two systems."

3.21.5 paragraph 3.7.9: After the words "...exceed 1 inch." In the 8th line of this paragraph add the following:

;", except in specific cases where components are used for electrical noise suppression and such exceptions are justified by the contractor and approved by the Government representative."

3.21.6 paragraph 3.11.2: Add the following:

'The instantaneous peak voltage applied to the Pulse' Output Energy Storage Capacitor used in the Equipment Room Cabinet Logic and I/O Power Supplies, however, may be up to 80% of the derated maximum of the component manufacturer's working voltage.'

3.21.1 paragraph 3.7.5: Add the following sentence as a new subparagraph:

"Specific authorization is given to use thick film microelectronic modules of demonstrated reliability, in accordance with Raytheon specification control drawing 450003, in the CDC-PVD character/vector generators."

3.21.2 paragraph 3.7.6:

The requirement for accessibility as specified in this paragraph (3.7.6 Accessibility) is waived for the AC/DC Converter located in the air plenum of the CUE equipment cabinets.

3.21.3 paragraph 3.7.6:

'In the case of the CUE/NCRD, it is allowable, when removing the Video Preamplifier Board, to first remove the Low Voltage Power Supply.'

3.21.4 paragraph 3.7.7: Add the following new sentence as a new subparagraph:

"The requirement of this paragraph shall apply to the replacement of a complete Standard Raytheon Computer Core Memory's System with a complete Ampex Core Memory System. However, the interchangeability of the major assemblies (i.e., memory unit or power supply) between the two system shall not be required provided no physical or electrical damage can result because of the mixing of the two systems."

3.21.5 paragraph 3.7.9: After the words "...exceed 1 inch." In the 8th line of this paragraph add the following:

;", except in specific cases where components are used for electrical noise suppression and such exceptions are justified by the contractor and approved by the Government representative."

3.21.6 paragraph 3.11.2: Add the following:

'The instantaneous peak voltage applied to the Pulse' Output Energy Storage Capacitor used in the Equipment Room Cabinet Logic and I/O Power Supplies, however, may be up to 80% of the derated maximum of the component manufacturer's working voltage.'

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Page 89: Add the following paragraph:

'3.22 ER-D-406-058.-plicable FAA Specification

The following modifications to ER-D-406-058 (3/4/63) are applicable to **this equipment**:

3.22.1 paragraph 3.2:

Design Data: Delete the words "for review and approval" in the sixth line of paragraph 3.2

3.22.2 paragraph 3.2.5: In the third line of paragraph 3.2.5, add the following after the word 'diagrams':

'or tabular logic lists.'

3.22.3 paragraph 3.2.7: Design Review and approval: Delete this paragraph in its entirety,

3.22.4 paragraph 3.3.1: Type I Progress Reports: Delete this paragraph in its entirety,

3.22.5 paragraph 3.3.2: Type II Interim Reports: Delete this paragraph in its entirety.

3.22.6 paragraph 3.3.4: SRDS-1 Exceptions Type II & Type III Reports: Delete this paragraph in its entirety.

3.22.7 paragraph 3.8- Add the following new subparagraph under 3.8:

"The contractor shall provided **Diazo Microfilm Duplicards**, or equivalent, of **CDC/RDS** manufacturing drawings. The drawing number, revision letter and number of sheets will be printed on top of the cards. The following categories of the above manufacturing drawings shall be provided: .

- a) Specification/Source Control Drawings
- b) Assembly Drawings
- c) Parts Lists
- d) Detail Drawings
- e) Cable Drawings
- f) Lead **Electricals**
- g) Manually Prepared Wiring Diagrams

One complete set of microfilm/aperture (M/A) cards, in the above categories, duplicating the most recent set

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which do not contain an installation section may be located elsewhere within the manual.'

3.23.13 paragraph 3.42.3: Delete the second sentence and substitute the following:

"Wave shapes of voltages, where significant, shall be located adjacent to the associated schematic in Section 12. Those wave shapes shall be present at important points throughout the circuit and reflect normal equipment connections and normal operation. Typical rather than ideal waveform drawings or photographs shall be shown and the points of measurement shall be given, either by **test-** points symbol, word description, or by means of partial schematics properly associated with **waveform** illustrations."

3.23.14 paragraph 3.42.4: Delete this **paragraph** in its entirety.

3.23.15 paragraph 3.46: Change the third sentence of this paragraph to read:

"For equipment consisting of two **or more** major assemblies (3.25.6.2) with different FAA type numbers, the parts list shall be in subdivisions for each FAA type numbers, each subdivision consisting of...."

3.23.16 paragraph 3.46: Add the following at the end of this paragraph:

'If the contractor is supplying as a separate item a Replaceable Parts List in accordance with **FAA-G-1210a**, Section 10 shall consist of a headed right hand page **carryign** the following paragraph:

1. **INTRODUCTION.**- Descriptive data identifying all electrical components and mechanical parts of (equipment title) (abbreviation) Type **FA-79 (##)** is provided in the following document under separate cover: Replaceable Parts List for (System Name) Contract No. **FA67NS-27**.

3.23.17 paragraph 3.46.1: Replace the '**6th Column**' description with the following:

'**6th column:** QUANTITY USED (the part quantity used per the particular FAA type number for which the list is compiled)'

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"For equipment consisting of two or more major assemblies (3.25.6.2) with different FAA type numbers, the parts list shall be in subdivisions for each FAA type numbers, each subdivision consisting of...."

3.23.16 paragraph 3.46: Add the following at the end of this paragraph:

'If the contractor is supplying as a separate item a Replaceable Parts List in accordance with **FAA-G-1210a**, Section 10 shall consist of a headed right hand page **carryign** the following paragraph:

1. **INTRODUCTION.**- Descriptive data identifying all electrical components and mechanical parts of (equipment title) (abbreviation) Type **FA-79 (##)** is provided in the following document under separate cover: Replaceable Parts List for (System Name) Contract No. **FA67NS-27**.

3.23.17 paragraph 3.46.1: Replace the '6th Column' description with the following:

'6th column: QUANTITY USED (the part quantity used per the particular FAA type number for which the list is compiled)'



which do not contain an installation section may be located elsewhere within the manual.'

3.23.13 paragraph 3.42.3: Delete the second sentence and substitute the following:

"Wave shapes of voltages, where significant, shall be located adjacent to the associated schematic in Section 12. Those wave shapes shall be present at important points throughout the circuit and reflect normal equipment connections and normal operation. Typical rather than ideal waveform drawings or photographs shall be shown and the points of measurement shall be given, either by **test-** points symbol, word description, or by means of partial schematics properly associated with **waveform** illustrations."

3.23.14 paragraph 3.42.4: Delete this paragraph in its entirety.

3.23.15 paragraph 3.46: Change the third sentence of this paragraph to read:

"For equipment consisting of two or more major assemblies (3.25.6.2) with different FAA type numbers, the parts list shall be in subdivisions for each FAA type numbers, each subdivision consisting of...."

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3.23.17 paragraph 3.46.1: Replace the '6th Column' description with the following:

'6th column: QUANTITY USED (the part quantity used per the particular FAA type number for which the list is compiled)'

**1. 1. 5** As shown in figure 1-2, I-C logic element locations on the I-C element side of the panel assembly are read from right to left as opposed to the I-C logic element locations on the panel assembly wiring side. On the I-C element side logic element locations, start with element 1A on the panel top right side. On the panel wiring side element locations, start with element 1A on the panel top left side. Logic element pins on the panel wiring side are numbered in a clockwise direction starting from the top left pin.

**1. 1. 6** As an example, assume that the logic equation list indicates that signal F CCRCB09 should be present at A1A4A2X12N pins 04 and 07. To assure that the signal is present first determine what is meant by the term A1A4A2X12N. As shown by figure 1-1, designation A 1 identifies the book assembly while designation A4 identifies the page. Designation A2 identifies the panel assembly while designation 12N (figure 1-2) provides the I-C element row and column coordinates. The letter X provides separation between I-C coordinate location data and the panel assembly designation.

**1. 1. 7** The input/output (I/O) plugs (figure 1-3) for the page assembly are mounted on each panel and are designated J19, J20, J21, J22, J23, J24, J25, and J26. These plugs provide the connections for cabling between book assembly A1 and the memory and I/O card assemblies. Plugs J19 through J26 also provide the connections for cabling between page assemblies. Connections for plugs J19 through J26 to other NRKM assemblies are covered in the logic equation lists. Connections between pages via plugs J19 through J26 are covered in a separate chassis map wiring list. The input/output plugs each consist of a double column of 13 pins each designated 1 through 13 and 14 through 26. Thus if the logic equation list indicates that a signal is present at A1A2A4J19 pin 5 (05), this terminal can be located on plug J19 of panel A14 in page A2 of book assembly A1.

**1. 1. 8** Input/output connections between panels are made through 40-pin adjacent panel connectors designated J1, J2, J3, J4, J5, at the top of the panel; and J14, J15, J16, J17, and J18 at the bottom (see figure 1-3). As an example, connector ● TM panel A 1 is wired to connector J2 panel A2; connector J14 panel A1 is wired to connector J1 panel A2 etc. Pins of the panel connectors are arranged in two rows of 1 through 20 and 21 through 40 from right to left.

**1. 1. 5** As shown in figure 1-2, I-C logic element locations on the I-C element side of the panel assembly are read from right to left as opposed to the I-C logic element locations on the panel assembly wiring side. On the I-C element side logic element locations, start with element 1A on the panel top right side. On the panel wiring side element locations, start with element 1A on the panel top left side. Logic element pins on the panel wiring side are numbered in a clockwise direction starting from the top left pin.

**1. 1. 6** As an example, assume that the logic equation list indicates that signal F CCRCB09 should be present at A1A4A2X12N pins 04 and 07. To assure that the signal is present first determine what is meant by the term A1A4A2X12N. As shown by figure 1-1, designation A 1 identifies the book assembly while designation A4 identifies the page. Designation A2 identifies the panel assembly while designation 12N (figure 1-2) provides the I-C element row and column coordinates. The letter X provides separation between I-C coordinate location data and the panel assembly designation.

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**1. 1. 8** Input/output connections between panels are made through 40-pin adjacent panel connectors designated J1, J2, J3, J4, J5, at the top of the panel; and J14, J15, J16, J17, and J18 at the bottom (see figure 1-3). As an example, connector ● TM panel A 1 is wired to connector J2 panel A2; connector J14 panel A1 is wired to connector J1 panel A2 etc. Pins of the panel connectors are arranged in two rows of 1 through 20 and 21 through 40 from right to left.

**1. 1. 5** As shown in figure 1-2, I-C logic element locations on the I-C element side of the panel assembly are read from right to left as opposed to the I-C logic element locations on the panel assembly wiring side. On the I-C element side logic element locations, start with element 1A on the panel top right side. On the panel wiring side element locations, start with element 1A on the panel top left side. Logic element pins on the panel wiring side are numbered in a clockwise direction starting from the top left pin.

**1. 1. 6** As an example, assume that the logic equation list indicates that signal F CCRCB09 should be present at A1A4A2X12N pins 04 and 07. To assure that the signal is present first determine what is meant by the term A1A4A2X12N. As shown by figure 1-1, designation A 1 identifies the book assembly while designation A4 identifies the page. Designation A2 identifies the panel assembly while designation 12N (figure 1-2) provides the I-C element row and column coordinates. The letter X provides separation between I-C coordinate location data and the panel assembly designation.

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**1. 1. 8** Input/output connections between panels are made through 40-pin adjacent panel connectors designated J1, J2, J3, J4, J5, at the top of the panel; and J14, J15, J16, J17, and J18 at the bottom (see figure 1-3). As an example, connector ● TM panel A 1 is wired to connector J2 panel A2; connector J14 panel A1 is wired to connector J1 panel A2 etc. Pins of the panel connectors are arranged in two rows of 1 through 20 and 21 through 40 from right to left.

**1. 1. 5** As shown in figure 1-2, I-C logic element locations on the I-C element side of the panel assembly are read from right to left as opposed to the I-C logic element locations on the panel assembly wiring side. On the I-C element side logic element locations, start with element 1A on the panel top right side. On the panel wiring side element locations, start with element 1A on the panel top left side. Logic element pins on the panel wiring side are numbered in a clockwise direction starting from the top left pin.

**1. 1. 6** As an example, assume that the logic equation list indicates that signal F CCRCB09 should be present at A1A4A2X12N pins 04 and 07. To assure that the signal is present first determine what is meant by the term A1A4A2X12N. As shown by figure 1-1, designation A 1 identifies the book assembly while designation A4 identifies the page. Designation A2 identifies the panel assembly while designation 12N (figure 1-2) provides the I-C element row and column coordinates. The letter X provides separation between I-C coordinate location data and the panel assembly designation.

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**1. 1. 5** As shown in figure 1-2, I-C logic element locations on the I-C element side of the panel assembly are read from right to left as opposed to the I-C logic element locations on the panel assembly wiring side. On the I-C element side logic element locations, start with element 1A on the panel top right side. On the panel wiring side element locations, start with element 1A on the panel top left side. Logic element pins on the panel wiring side are numbered in a clockwise direction starting from the top left pin.

**1. 1. 6** As an example, assume that the logic equation list indicates that signal F CCRCB09 should be present at A1A4A2X12N pins 04 and 07. To assure that the signal is present first determine what is meant by the term A1A4A2X12N. As shown by figure 1-1, designation A 1 identifies the book assembly while designation A4 identifies the page. Designation A2 identifies the panel assembly while designation 12N (figure 1-2) provides the I-C element row and column coordinates. The letter X provides separation between I-C coordinate location data and the panel assembly designation.

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**1. 1. 5** As shown in figure 1-2, I-C logic element locations on the I-C element side of the panel assembly are read from right to left as opposed to the I-C logic element locations on the panel assembly wiring side. On the I-C element side logic element locations, start with element 1A on the panel top right side. On the panel wiring side element locations, start with element 1A on the panel top left side. Logic element pins on the panel wiring side are numbered in a clockwise direction starting from the top left pin.

**1. 1. 6** As an example, assume that the logic equation list indicates that signal F CCRCB09 should be present at A1A4A2X12N pins 04 and 07. To assure that the signal is present first determine what is meant by the term A1A4A2X12N. As shown by figure 1-1, designation A 1 identifies the book assembly while designation A4 identifies the page. Designation A2 identifies the panel assembly while designation 12N (figure 1-2) provides the I-C element row and column coordinates. The letter X provides separation between I-C coordinate location data and the panel assembly designation.

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**1. 1. 5** As shown in figure 1-2, I-C logic element locations on the I-C element side of the panel assembly are read from right to left as opposed to the I-C logic element locations on the panel assembly wiring side. On the I-C element side logic element locations, start with element 1A on the panel top right side. On the panel wiring side element locations, start with element 1A on the panel top left side. Logic element pins on the panel wiring side are numbered in a clockwise direction starting from the top left pin.

**1. 1. 6** As an example, assume that the logic equation list indicates that signal F CCRCB09 should be present at A1A4A2X12N pins 04 and 07. To assure that the signal is present first determine what is meant by the term A1A4A2X12N. As shown by figure 1-1, designation A 1 identifies the book assembly while designation A4 identifies the page. Designation A2 identifies the panel assembly while designation 12N (figure 1-2) provides the I-C element row and column coordinates. The letter X provides separation between I-C coordinate location data and the panel assembly designation.

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Attach. A.

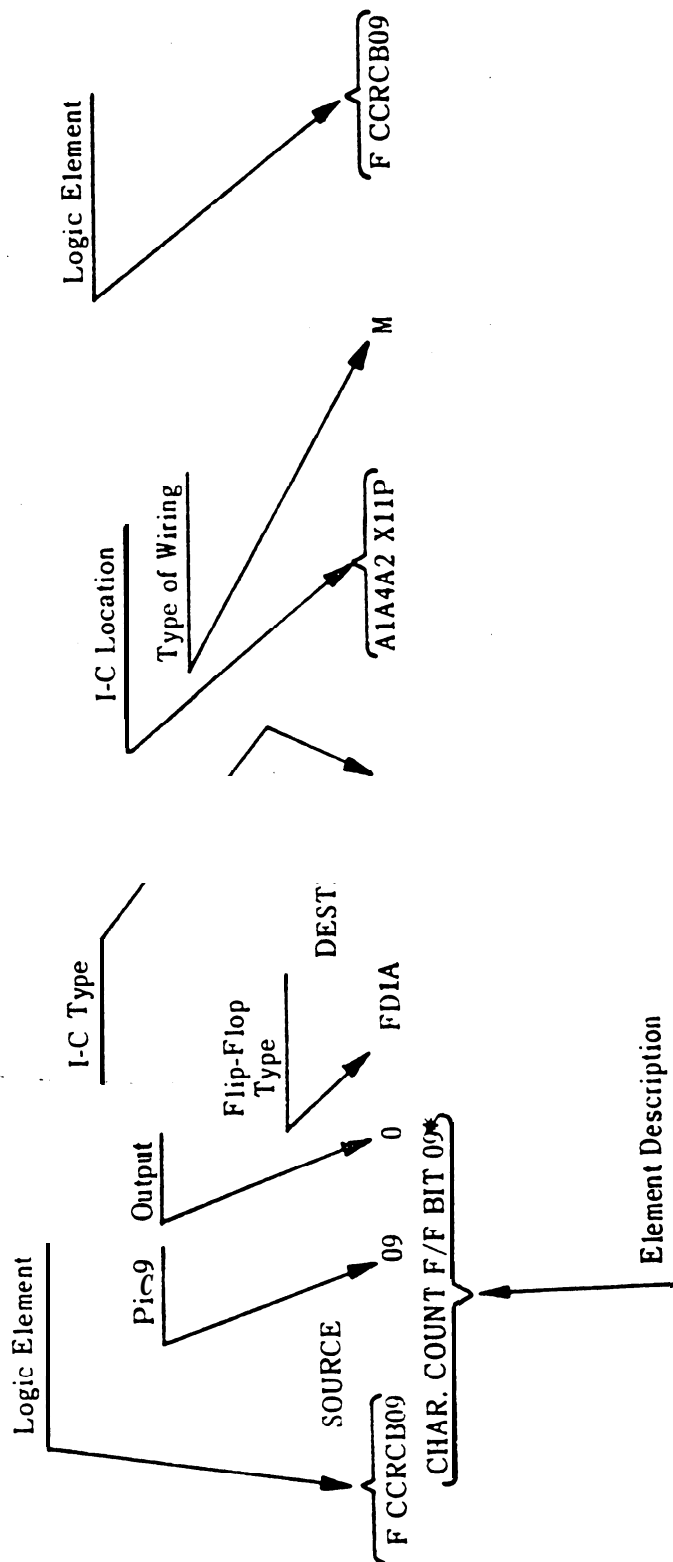


Figure 2-6. Logic-Tabular List Entry Part A

Attach. A.

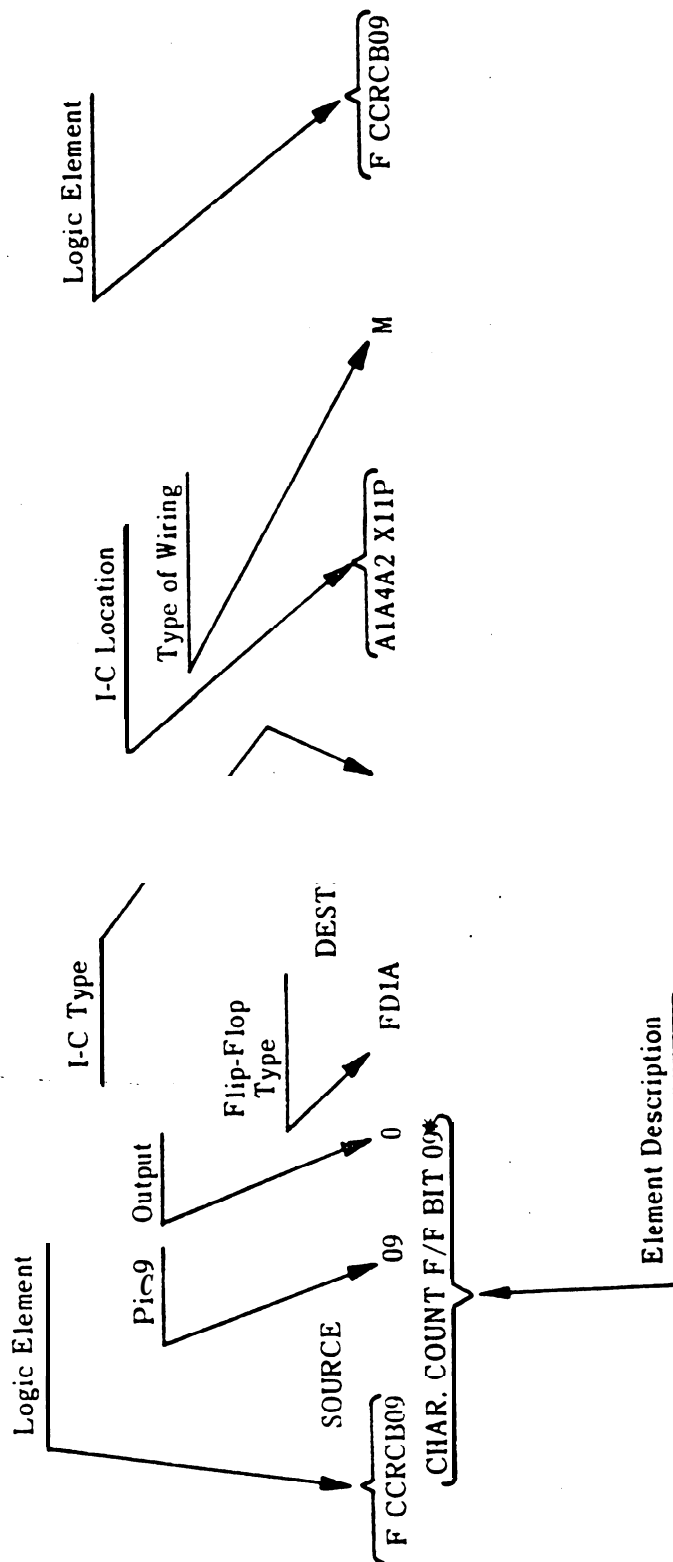


Figure 2-6. Logic-Tabular List Entry Part A

Attach. A.

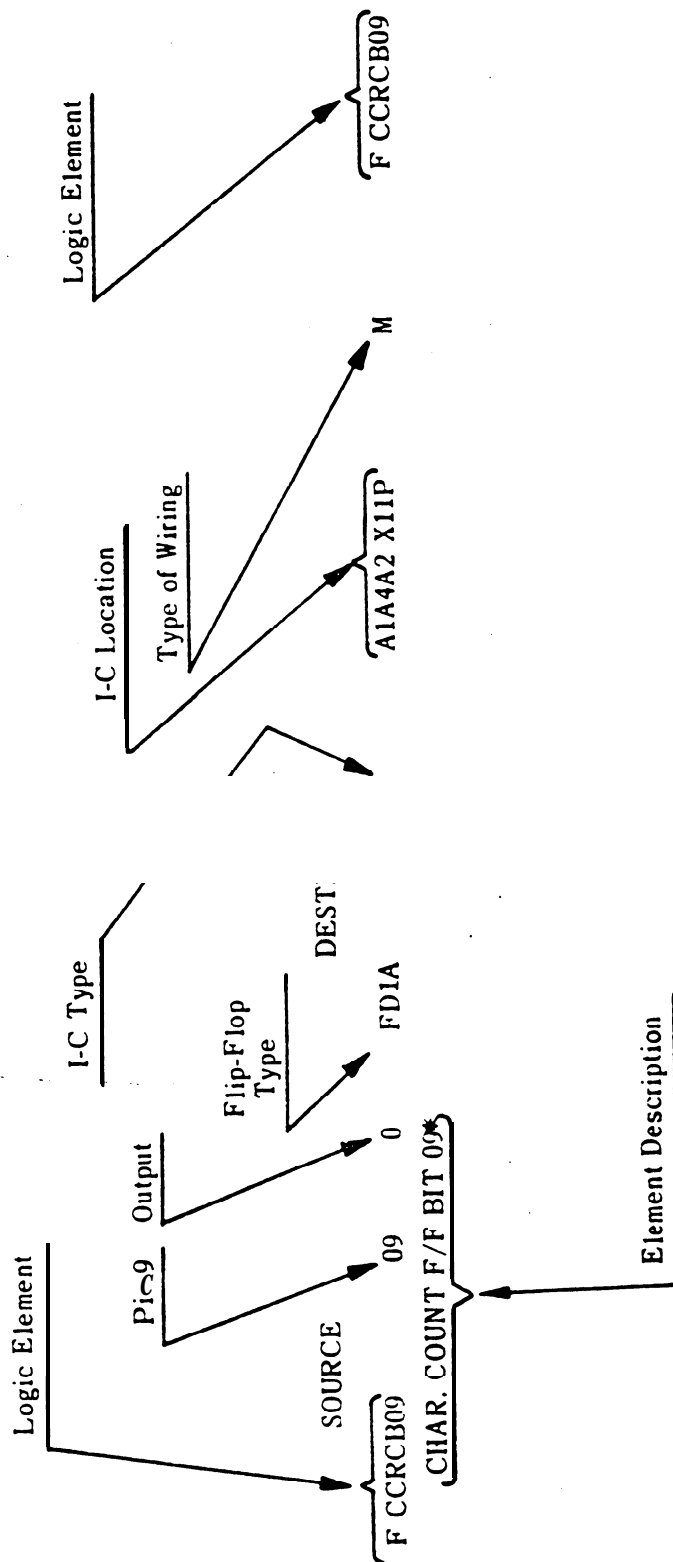


Figure 2-6. Logic-Tabular List Entry Part A

Attach. A.

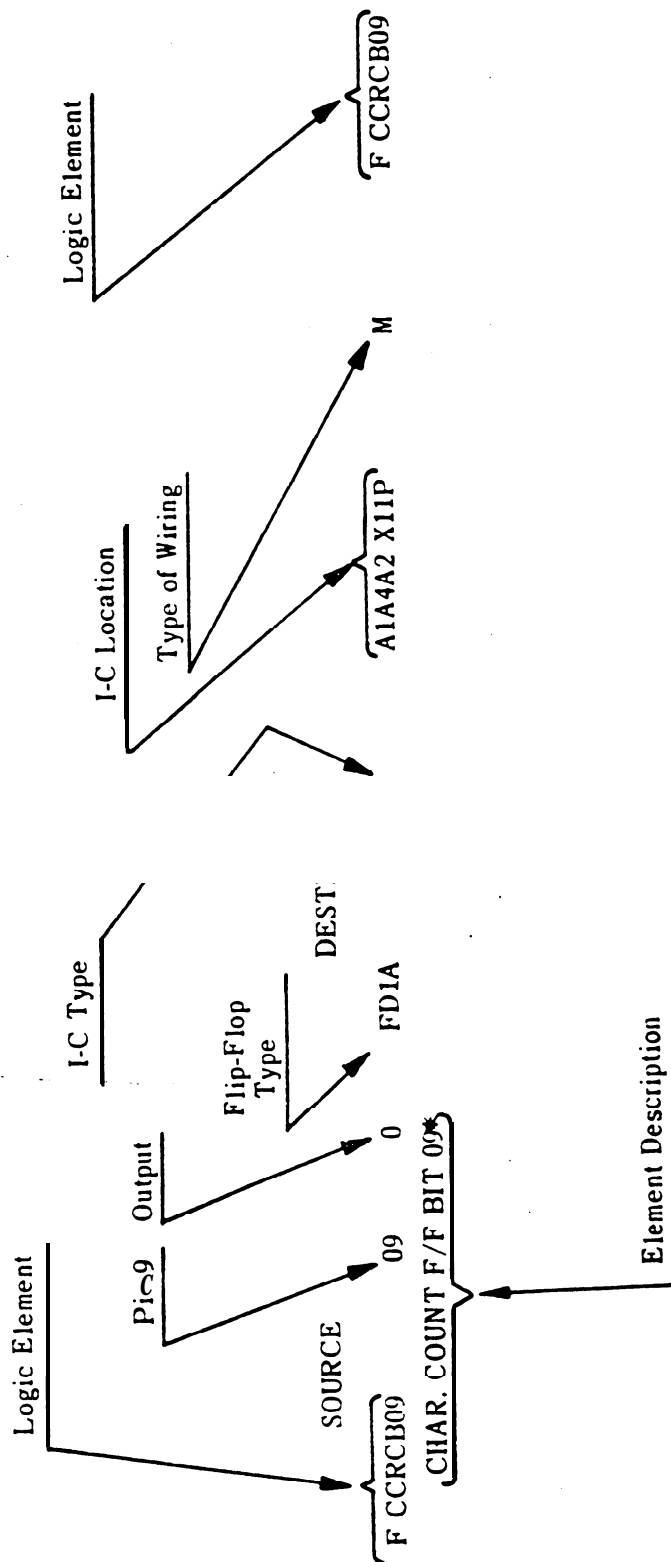


Figure 2-6. Logic-Tabular List Entry Part A

Attach. A.

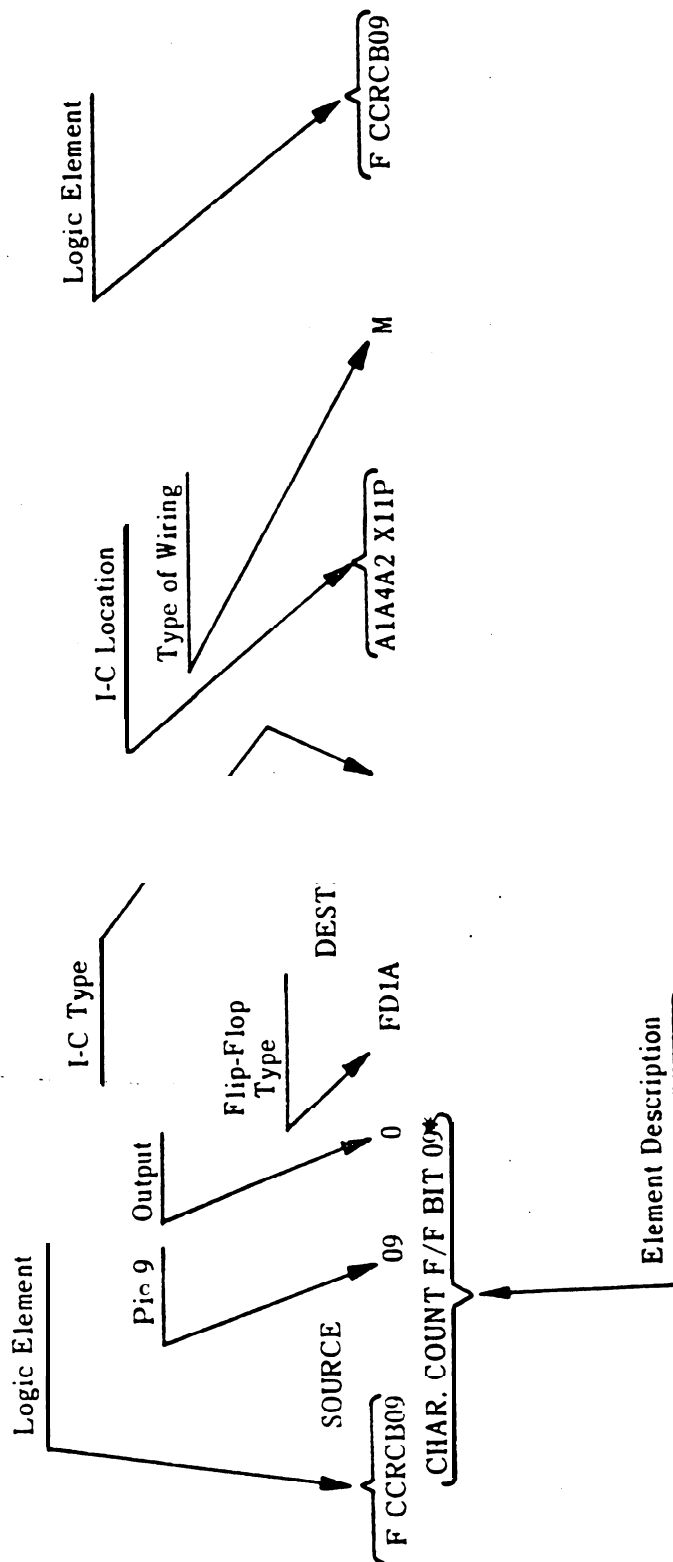


Figure 2-6. Logic-Tabular List Entry Part A

Attach. A.

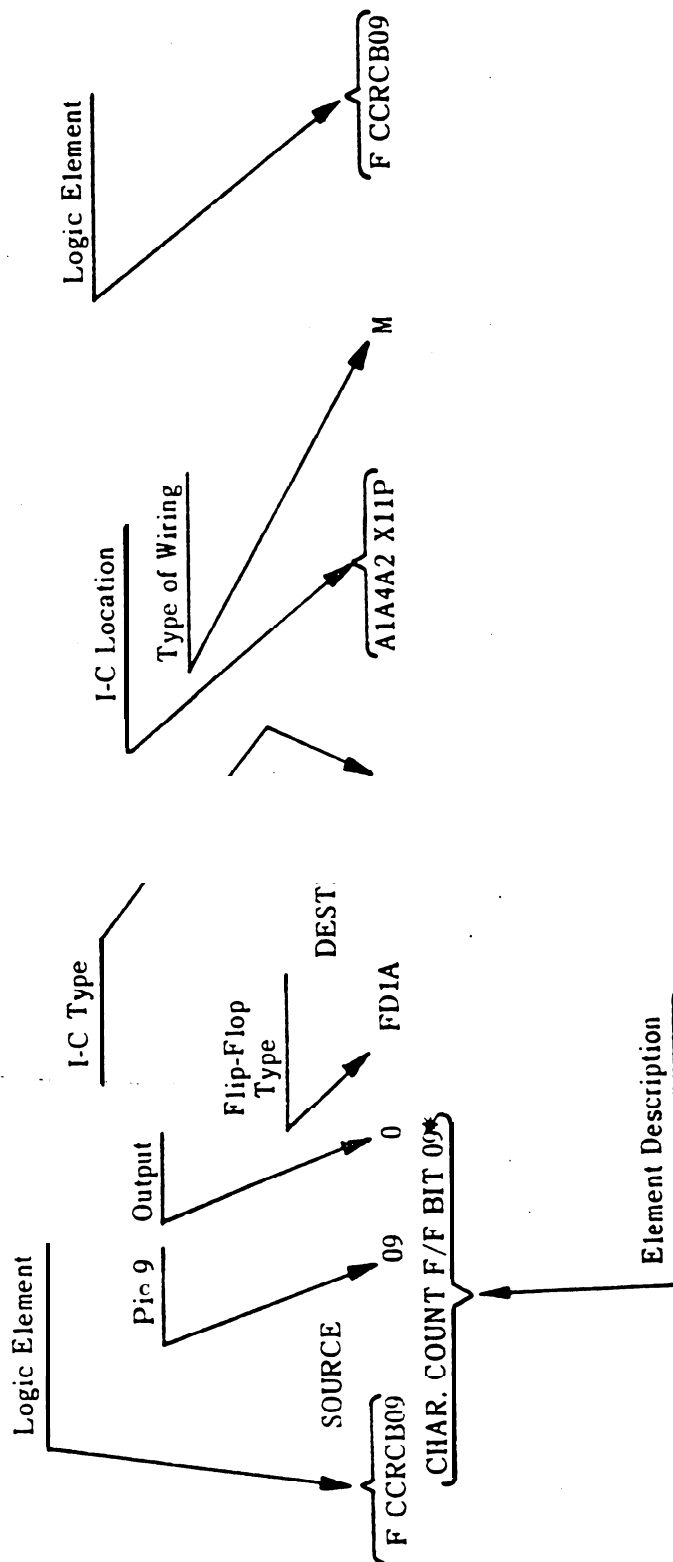


Figure 2-6. Logic-Tabular List Entry Part A

Attach. A.

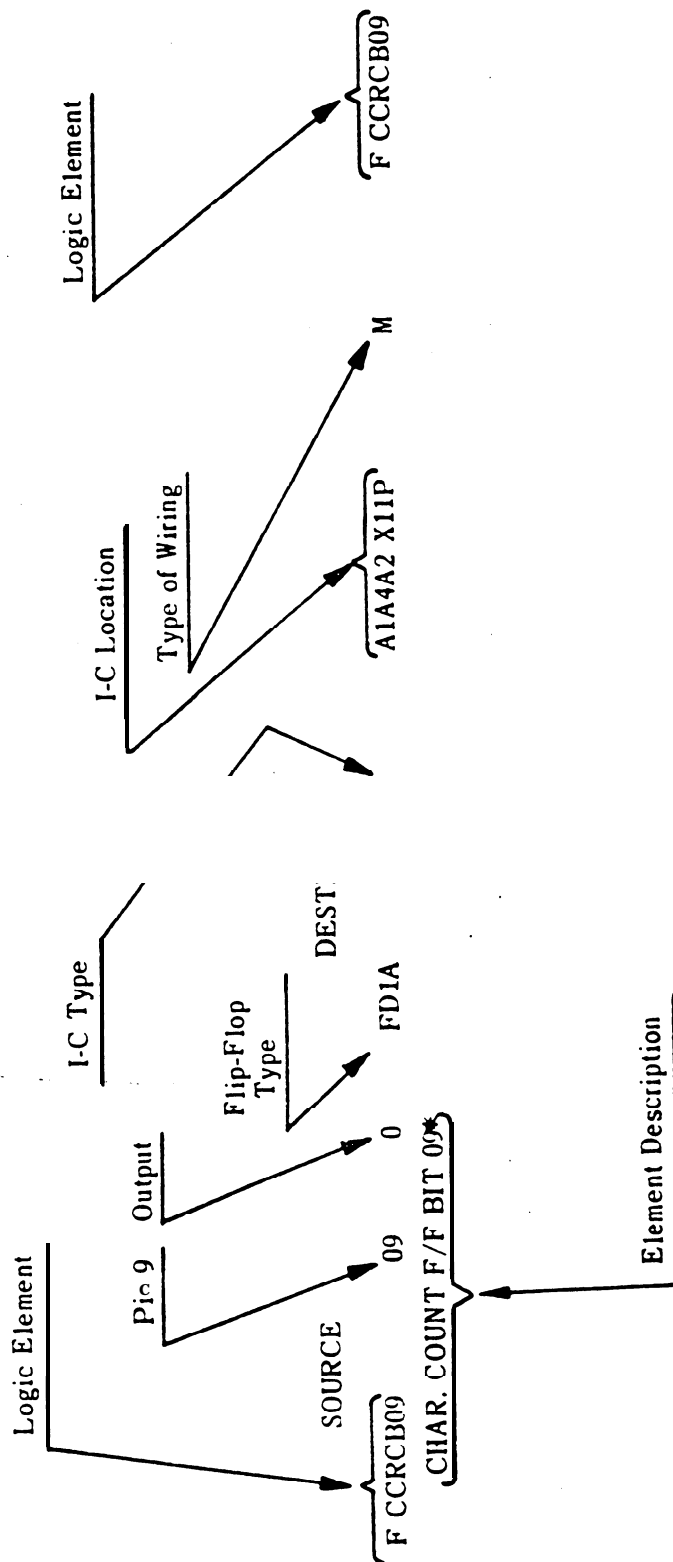


Figure 2-6. Logic-Tabular List Entry Part A



Attach. A.

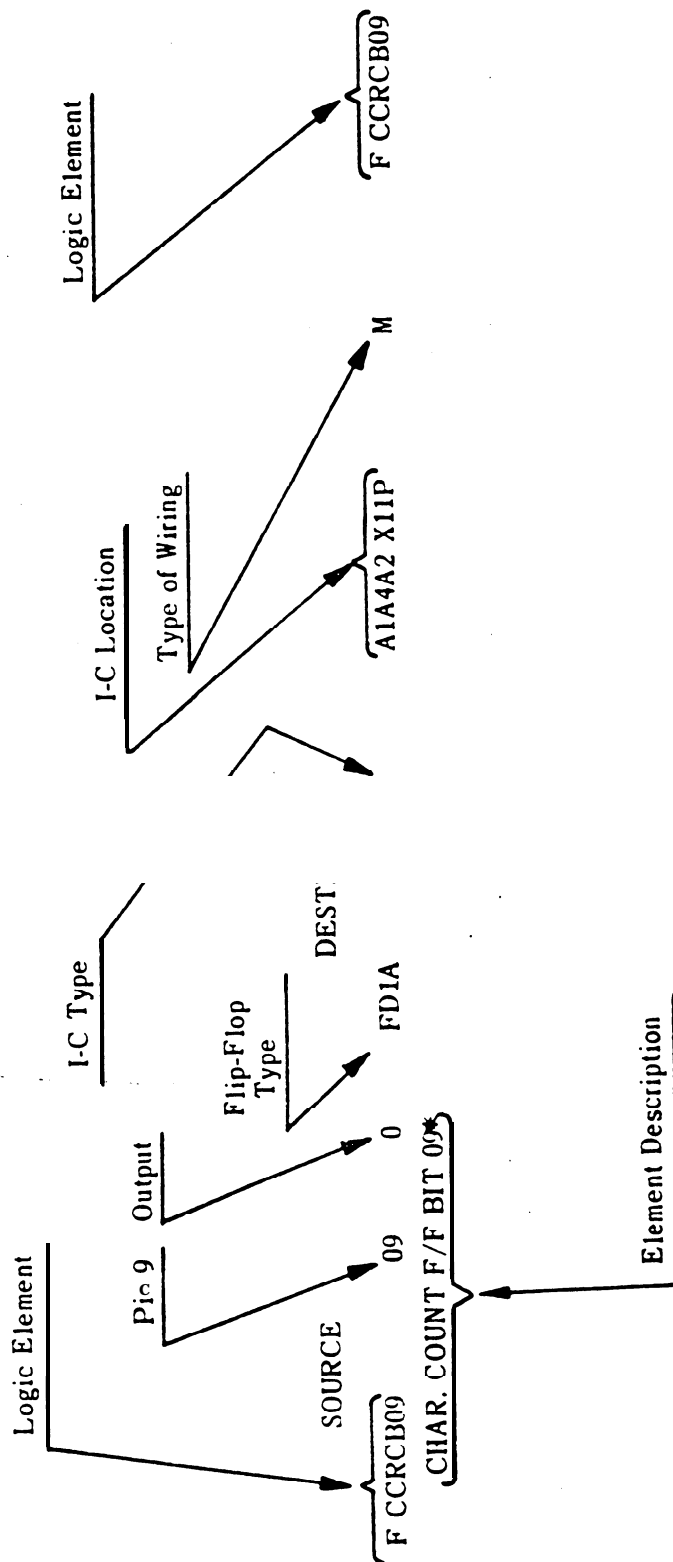


Figure 2-6. Logic-Tabular List Entry Part A

Attach. A.

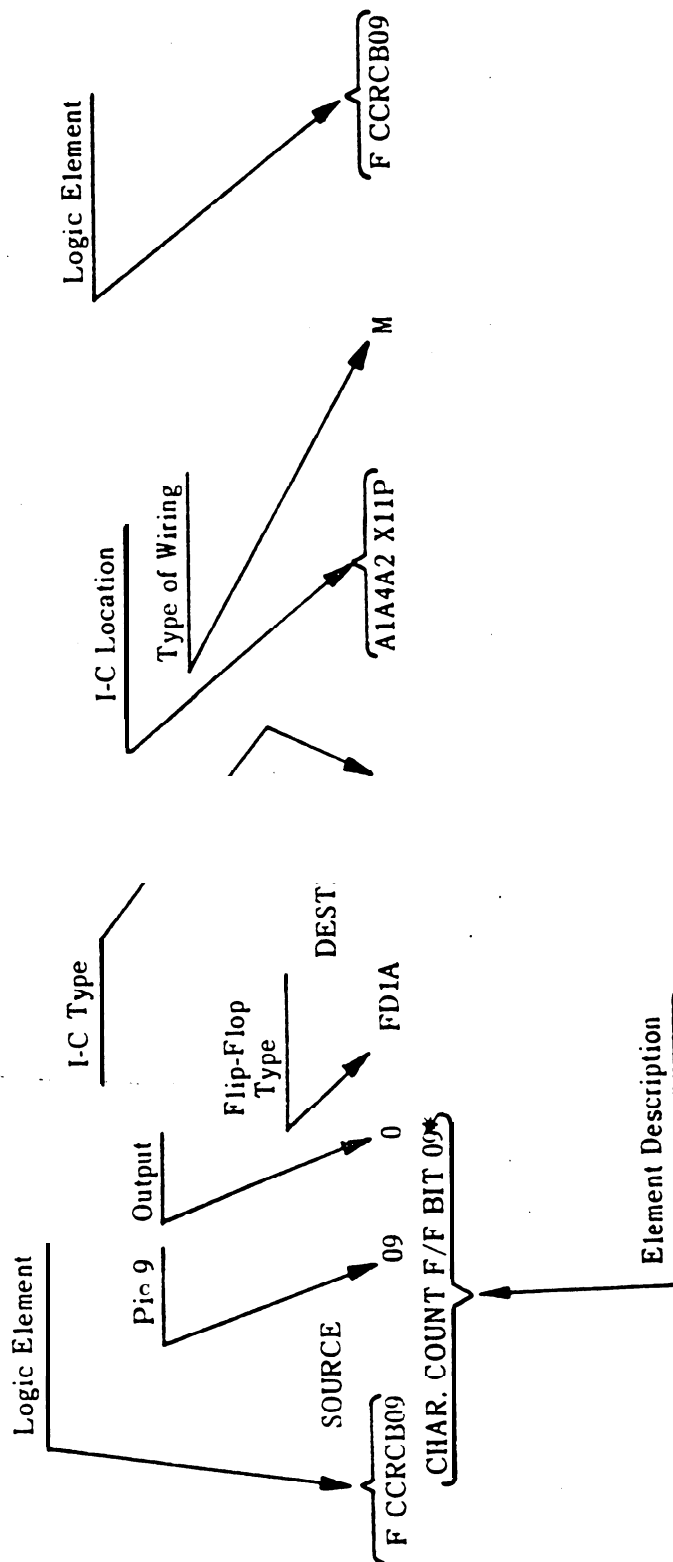


Figure 2-6. Logic-Tabular List Entry Part A

A-19

SOURCE						DESTINATION					
S KPD20035 L = 08 0						7451 A1A4A4 X11K M S KPD20035					
EXCLUSIVE OR BIT 5 FIRST POSITION A*											
I	GOA	PL5	H	,	09	I	S KPD20007 A1A4A4X11N 06				
S	KPRA05	H	+	10	I						
S	KPPLA5	H	,	13	I						
F	KPRA05	H	*	01	I						

Figure 2-10. Dual 2-Wide 2-Input AND-NOR Gate Tabular Breakdown

A-19

SOURCE						DESTINATION					
S KPD20035 L = 08 0						7451 A1A4A4 X11K M S KPD20035					
EXCLUSIVE OR BIT 5 FIRST POSITION A*											
I	GOA	PL5	H	,	09	I	S KPD20007 A1A4A4X11N 06				
S	KPRA05	H	+	10	I						
S	KPPLA5	H	,	13	I						
F	KPRA05	H	*	01	I						

Figure 2-10. Dual 2-Wide 2-Input AND-NOR Gate Tabular Breakdown

A-19

SOURCE						DESTINATION					
S KPD20035 L = 08 0						7451 A1A4A4 X11K M S KPD20035					
EXCLUSIVE OR BIT 5 FIRST POSITION A*											
I	GOA	PL5	H	,	09	I	S KPD20007 A1A4A4X11N 06				
S	KPRA05	H	+	10	I						
S	KPPLA5	H	,	13	I						
F	KPRA05	H	*	01	I						

Figure 2-10. Dual 2-Wide 2-Input AND-NOR Gate Tabular Breakdown

A-19

SOURCE						DESTINATION					
S KPD20035 L = 08 0						7451 A1A4A4 X11K M S KPD20035					
EXCLUSIVE OR BIT 5 FIRST POSITION A*											
I	GOA	PL5	H	,	09	I	S KPD20007 A1A4A4X11N 06				
S	KPRA05	H	+	10	I						
S	KPPLA5	H	,	13	I						
F	KPRA05	H	*	01	I						

Figure 2-10. Dual 2-Wide 2-Input AND-NOR Gate Tabular Breakdown

A-19

SOURCE						DESTINATION					
S KPD20035 L = 08 0						7451 A1A4A4 X11K M S KPD20035					
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I	GOA	PL5	H	,	09	I	S KPD20007 A1A4A4X11N 06				
S	KPRA05	H	+	10	I						
S	KPPLA5	H	,	13	I						
F	KPRA05	H	*	01	I						

Figure 2-10. Dual 2-Wide 2-Input AND-NOR Gate Tabular Breakdown

A-19

SOURCE						DESTINATION					
S KPD20035 L = 08 0						7451 A1A4A4 X11K M S KPD20035					
EXCLUSIVE OR BIT 5 FIRST POSITION A*											
I	GOA	PL5	H	,	09	I	S KPD20007 A1A4A4X11N 06				
S	KPRA05	H	+	10	I						
S	KPPLA5	H	,	13	I						
F	KPRA05	H	*	01	I						

Figure 2-10. Dual 2-Wide 2-Input AND-NOR Gate Tabular Breakdown



A-19

SOURCE						DESTINATION					
S KPD20035 L = 08 0						7451 A1A4A4 X11K M S KPD20035					
EXCLUSIVE OR BIT 5 FIRST POSITION A*											
I	GOA	PL5	H	,	09	I	S KPD20007 A1A4A4X11N 06				
S	KPRA05	H	+	10	I						
S	KPPLA5	H	,	13	I						
F	KPRA05	H	*	01	I						

Figure 2-10. Dual 2-Wide 2-Input AND-NOR Gate Tabular Breakdown

A-19

SOURCE						DESTINATION					
S KPD20035 L = 08 0						7451 A1A4A4 X11K M S KPD20035					
EXCLUSIVE OR BIT 5 FIRST POSITION A*											
I	GOA	PL5	H	,	09	I	S KPD20007 A1A4A4X11N 06				
S	KPRA05	H	+	10	I						
S	KPPLA5	H	,	13	I						
F	KPRA05	H	*	01	I						

Figure 2-10. Dual 2-Wide 2-Input AND-NOR Gate Tabular Breakdown

A-19

SOURCE						DESTINATION					
S KPD20035 L = 08 0						7451 A1A4A4 X11K M S KPD20035					
EXCLUSIVE OR BIT 5 FIRST POSITION A*											
I	GOA	PL5	H	,	09	I	S KPD20007 A1A4A4X11N 06				
S	KPRA05	H	+	10	I						
S	KPPLA5	H	,	13	I						
F	KPRA05	H	*	01	I						

Figure 2-10. Dual 2-Wide 2-Input AND-NOR Gate Tabular Breakdown

Wire List

COMPOSITE WIRE LIST--ON PANEL

MAJOR REF. DES: AIAIAI

SIGNAL NAME	WIRE NO.	MAJOR CODE	FROM--	MINOR CODE	MINOR--	PIN	MAJOR CODE	MINOR--	PIN	WRAP	LEVEL	LENGTH	WIRE TYPE
ATST	-1	AIAIAI	J02	01	AIAIAI	X08A	02	1	67	1	1	67	T PRI
ATST	-2	AIAIAI	J02	02	AIAIAI	X08A	07	1	63	1	1	63	T SEC
ATST	-1	AIAIAI	X08A	02	AIAIAI	J10	03	2	145	2	2	145	T PRI
ATST	-1	AIAIAI	X08A	07	AIAIAI	J10	04	2	141	2	2	141	T SEC
ATST	-1	AIAIAI	J07	09	AIAIAI	J02	01	1	166	1	1	166	M
STST	-S	AIAIAI	X10A	10	AIAIAI	J10	05	1	141	1	1	141	T PRI
STST	-S	AIAIAI	X10A	07	AIAIAI	J10	06	1	133	1	1	133	T SEC
CLOCK	-S	AIAIAI	X14S	05	AIAIAI	X10A	08	1	136	1	1	136	M
CLOCK	-S	AIAIAI	X10A	09	AIAIAI	X04A	02	2	37	2	2	37	M
CLOCK	-S	AIAIAI	X04A	02	AIAIAI	J02	03	1	49	1	1	49	M
CTST	-S	AIAIAI	X14S	13	AIAIAI	X08A	05	1	152	1	1	152	M
CTST	-S	AIAIAI	X08A	03	AIAIAI	J02	08	2	73	2	2	73	M
DTST	-S	AIAIAI	X04C	04	AIAIAI	J02	06	1	34	1	1	34	M
ETST	-S	AIAIAI	X10A	13	AIAIAI	X04C	05	1	52	1	1	52	M
ETST	-S	AIAIAI	X04C	05	AIAIAI	J02	09	2	36	2	2	36	M
ITST	-S	AIAIAI	X08A	01	AIAIAI	X04A	11	1	20	1	1	20	M
ITST	-S	AIAIAI	X04A	11	AIAIAI	J02	10	2	57	2	2	57	M
JOE2COOP-S	-S	AIAIAI	J12	01	AIAIAI	X14S	01	1	52	1	1	52	C PRI
JOE2COOP-S	-S	AIAIAI	J12	02	AIAIAI	X14S	07	1	45	1	1	45	C SEC
JTCT	-S	AIAIAI	X07H	06	AIAIAI	X10A	08	1	73	1	1	73	M
KTST	-S	AIAIAI	X04A	08	AIAIAI	X07H	02	1	63	1	1	63	M
KTST	-S	AIAIAI	X07H	02	AIAIAI	X07H	09	2	7	2	2	7	M
KTST	-S	AIAIAI	X07H	09	AIAIAI	J07	10	1	73	1	1	73	M
LIP1	-S	AIAIAI	X10A	03	AIAIAI	J02	11	1	66	1	1	66	M
LIP2	-S	AIAIAI	X10A	05	AIAIAI	J04	03	1	124	1	1	124	M
LIP2	-S	AIAIAI	J04	03	AIAIAI	J06	11	2	72	2	2	72	M
LTST	-S	AIAIAI	X07H	08	AIAIAI	J04	01	1	52	1	1	52	T PRI
LTST	-S	AIAIAI	X07H	07	AIAIAI	J04	02	1	50	1	1	50	T SEC
LTST	-S	AIAIAI	J07	11	AIAIAI	X07H	08	1	71	1	1	71	M
ROCK1	-F	AIAIAI	J10	01	AIAIAI	X14S	02	1	21	1	1	21	T PRI
ROCK1	-F	AIAIAI	J10	02	AIAIAI	X14S	07	1	15	1	1	15	T SEC
WTST	-S	AIAIAI	X04A	05	AIAIAI	X14S	11	1	172	1	1	172	M
WTST	-S	AIAIAI	X14S	11	AIAIAI	J06	10	2	61	2	2	61	M
WTST	-S	AIAIAI	J06	10	AIAIAI	X14S	10	1	60	1	1	60	M
GOO01	-G	AIAIAI	J02	04	AIAIAI	X04A	07	1	45	1	1	45	M

*Wire List*

COMPOSITE WIRE LIST--ON PANEL

MAJOR REF. DES	WIRE NO	WIRE NAME	FROM--		TO--		MAJOR CODE	MINOR--	PIN	WRAP	LEVEL	LENGTH	WIRE TYPE
			MAJOR CODE	MINOR--	MAJOR CODE	MINOR--							
ATST	-1	A1A1A1	J02	01	A1A1A1	X08A	02	1	67	T PRI			
ATST	-2	A1A1A1	J02	02	A1A1A1	X08A	07	1	63	T SEC			
ATST	-1	A1A1A1	X08A	02	A1A1A1	J10	03	2	145	T PRI			
ATST	-1	A1A1A1	X08A	07	A1A1A1	J10	04	2	141	T SEC			
ATST	-1	A1A1A1	J07	09	A1A1A1	J02	01	1	166	M			
STST	-S	A1A1A1	X10A	10	A1A1A1	J10	05	1	141	T PRI			
STST	-S	A1A1A1	X10A	07	A1A1A1	J10	06	1	133	T SEC			
CLOCK	-S	A1A1A1	X14S	05	A1A1A1	X10A	08	1	136	M			
CLOCK	-S	A1A1A1	X10A	09	A1A1A1	X04A	02	2	37	M			
CLOCK	-S	A1A1A1	X04A	02	A1A1A1	J02	03	1	49	M			
CTST	-S	A1A1A1	X14S	13	A1A1A1	X08A	05	1	152	M			
CTST	-S	A1A1A1	X08A	03	A1A1A1	J02	08	2	73	M			
DTST	-S	A1A1A1	X04C	04	A1A1A1	J02	06	1	34	M			
ETST	-S	A1A1A1	X10A	13	A1A1A1	X04C	05	1	52	M			
ETST	-S	A1A1A1	X04C	05	A1A1A1	J02	09	2	36	M			
ITST	-S	A1A1A1	X08A	01	A1A1A1	X04A	11	1	20	M			
ITST	-S	A1A1A1	X04A	11	A1A1A1	J02	10	2	57	M			
JOE2COOP-S		A1A1A1	J12	01	A1A1A1	X14S	01	1	52	C PRI			
JOE2COOP-S		A1A1A1	J12	02	A1A1A1	X14S	07	1	45	C SEC			
JTCT	-S	A1A1A1	X07H	06	A1A1A1	X10A	08	1	73	M			
KTST	-S	A1A1A1	X04A	08	A1A1A1	X07H	02	1	63	M			
KTST	-S	A1A1A1	X07H	02	A1A1A1	X07H	09	2	7	M			
KTST	-S	A1A1A1	X07H	09	A1A1A1	J07	10	1	73	M			
LIP1	-S	A1A1A1	X10A	03	A1A1A1	J02	11	1	66	M			
LIP2	-S	A1A1A1	X10A	05	A1A1A1	J04	03	1	124	M			
LIP2	-S	A1A1A1	J04	03	A1A1A1	J06	11	2	72	M			
LTST	-S	A1A1A1	X07H	08	A1A1A1	J04	01	1	52	T PRI			
LTST	-S	A1A1A1	X07H	07	A1A1A1	J04	02	1	50	T SEC			
LTST	-S	A1A1A1	J07	11	A1A1A1	X07H	08	1	71	M			
ROCK1	-F	A1A1A1	J10	01	A1A1A1	X14S	02	1	21	T PRI			
ROCK1	-F	A1A1A1	J10	02	A1A1A1	X14S	07	1	15	T SEC			
WTST	-S	A1A1A1	X04A	05	A1A1A1	X14S	11	1	172	M			
WTST	-S	A1A1A1	X14S	11	A1A1A1	J06	10	2	61	M			
WTST	-S	A1A1A1	J06	10	A1A1A1	X14S	10	1	60	M			
GOO01	-G	A1A1A1	J02	04	A1A1A1	X04A	07	1	45	M			

Wire Info

COMPOSITE WIRE LIST--ON PANEL

MAJOR REF. DES: AIAIAI

SIGNAL NAME	WIRE NO.	MAJOR CODE	FROM--	MINOR CODE	MINOR--	PIN	MAJOR CODE	MINOR--	PIN	WRAP	LEVEL	LENGTH	WIRE TYPE
ATST	-1	AIAIAI	J02	01	AIAIAI	X08A	02	1	67	1	1	67	T PRI
ATST	-2	AIAIAI	J02	02	AIAIAI	X08A	07	1	63	1	1	63	T SEC
ATST	-1	AIAIAI	X08A	02	AIAIAI	J10	03	2	145	2	2	145	T PRI
ATST	-1	AIAIAI	X08A	07	AIAIAI	J10	04	2	141	2	2	141	T SEC
ATST	-1	AIAIAI	J07	09	AIAIAI	J02	01	1	166	1	1	166	M
STST	-S	AIAIAI	X10A	10	AIAIAI	J10	05	1	141	1	1	141	T PRI
STST	-S	AIAIAI	X10A	07	AIAIAI	J10	06	1	133	1	1	133	T SEC
CLOCK	-S	AIAIAI	X14S	05	AIAIAI	X10A	08	1	136	1	1	136	M
CLOCK	-S	AIAIAI	X10A	09	AIAIAI	X04A	02	2	37	2	2	37	M
CLOCK	-S	AIAIAI	X04A	02	AIAIAI	J02	03	1	49	1	1	49	M
CTST	-S	AIAIAI	X14S	13	AIAIAI	X08A	05	1	152	1	1	152	M
CTST	-S	AIAIAI	X08A	03	AIAIAI	J02	08	2	73	2	2	73	M
DTST	-S	AIAIAI	X04C	04	AIAIAI	J02	06	1	34	1	1	34	M
ETST	-S	AIAIAI	X10A	13	AIAIAI	X04C	05	1	52	1	1	52	M
ETST	-S	AIAIAI	X04C	05	AIAIAI	J02	09	2	36	2	2	36	M
ITST	-S	AIAIAI	X08A	01	AIAIAI	X04A	11	1	20	1	1	20	M
ITST	-S	AIAIAI	X04A	11	AIAIAI	J02	10	2	57	2	2	57	M
JOE2COOP-S	-S	AIAIAI	J12	01	AIAIAI	X14S	01	1	52	1	1	52	C PRI
JOE2COOP-S	-S	AIAIAI	J12	02	AIAIAI	X14S	07	1	45	1	1	45	C SEC
JTCT	-S	AIAIAI	X07H	06	AIAIAI	X10A	08	1	73	1	1	73	M
KTST	-S	AIAIAI	X04A	08	AIAIAI	X07H	02	1	63	1	1	63	M
KTST	-S	AIAIAI	X07H	02	AIAIAI	X07H	09	2	7	2	2	7	M
KTST	-S	AIAIAI	X07H	09	AIAIAI	J07	10	1	73	1	1	73	M
LIP1	-S	AIAIAI	X10A	03	AIAIAI	J02	11	1	66	1	1	66	M
LIP2	-S	AIAIAI	X10A	05	AIAIAI	J04	03	1	124	1	1	124	M
LIP2	-S	AIAIAI	J04	03	AIAIAI	J06	11	2	72	2	2	72	M
LTST	-S	AIAIAI	X07H	08	AIAIAI	J04	01	1	52	1	1	52	T PRI
LTST	-S	AIAIAI	X07H	07	AIAIAI	J04	02	1	50	1	1	50	T SEC
LTST	-S	AIAIAI	J07	11	AIAIAI	X07H	08	1	71	1	1	71	M
ROCK1	-F	AIAIAI	J10	01	AIAIAI	X14S	02	1	21	1	1	21	T PRI
ROCK1	-F	AIAIAI	J10	02	AIAIAI	X14S	07	1	15	1	1	15	T SEC
WTST	-S	AIAIAI	X04A	05	AIAIAI	X14S	11	1	172	1	1	172	M
WTST	-S	AIAIAI	X14S	11	AIAIAI	J06	10	2	61	2	2	61	M
WTST	-S	AIAIAI	J06	10	AIAIAI	X14S	10	1	60	1	1	60	M
GOO01	-G	AIAIAI	J02	04	AIAIAI	X04A	07	1	45	1	1	45	M

Wire List

COMPOSITE WIRE LIST--ON PANEL

MAJOR REF. DES: A1A1A1

SIGNAL NAME		WIRE NO.	MAJOR CODE	MINOR CODE	MAJOR CODE	MINOR CODE	MINOR--PIN	WRAP LEVEL	LENGTH	WIRE TYPE
ATST	-1	1	A1A1A1	J02	01	A1A1A1	X08A	02	1	67 T PRI
ATST	-2	1	A1A1A1	J02	02	A1A1A1	X08A	07	1	63 T SEC
ATST	-1	2	A1A1A1	X08A	02	A1A1A1	J10	03	2	145 T PRI
ATST	-1	2	A1A1A1	X08A	07	A1A1A1	J10	04	2	141 T SEC
ATST	-1	3	A1A1A1	J07	09	A1A1A1	J02	01	1	166 M
STST	-S	3	A1A1A1	X10A	10	A1A1A1	J10	05	1	141 T PRI
STST	-S	3	A1A1A1	X10A	07	A1A1A1	J10	06	1	133 T SEC
CLOCK	-S	3	A1A1A1	X14S	05	A1A1A1	X10A	08	1	136 M
CLOCK	-S	4	A1A1A1	X10A	09	A1A1A1	X04A	02	2	37 M
CLOCK	-S	5	A1A1A1	X04A	02	A1A1A1	J02	03	1	49 M
CTST	-S	3	A1A1A1	X14S	13	A1A1A1	X08A	05	1	152 M
CTST	-S	4	A1A1A1	X08A	03	A1A1A1	J02	08	2	73 M
DTST	-S	3	A1A1A1	X04C	04	A1A1A1	J02	06	1	34 M
ETST	-S	2	A1A1A1	X10A	13	A1A1A1	X04C	05	1	52 M
ETST	-S	3	A1A1A1	X04C	05	A1A1A1	J02	09	2	36 M
ITST	-S	2	A1A1A1	X08A	01	A1A1A1	X04A	11	1	20 M
ITST	-S	3	A1A1A1	X04A	11	A1A1A1	J02	10	2	57 M
JOE2COOP-S		3	A1A1A1	J12	01	A1A1A1	X14S	01	1	52 C PRI
JOE2COOP-S		3	A1A1A1	J12	02	A1A1A1	X14S	07	1	45 C SEC
JTCT	-S	1	A1A1A1	X07H	06	A1A1A1	X10A	08	1	73 M
KTST	-S	1	A1A1A1	X04A	08	A1A1A1	X07H	02	1	63 M
KTST	-S	2	A1A1A1	X07H	02	A1A1A1	X07H	09	2	7 M
KTST	-S	3	A1A1A1	X07H	09	A1A1A1	J07	10	1	73 M
LIP1	-S	1	A1A1A1	X10A	03	A1A1A1	J02	11	1	66 M
LIP2	-S	1	A1A1A1	X10A	05	A1A1A1	J04	03	1	124 M
LIP2	-S	2	A1A1A1	J04	03	A1A1A1	J06	11	2	72 M
LTST	-S	1	A1A1A1	X07H	08	A1A1A1	J04	01	1	52 T PRI
LTST	-S	1	A1A1A1	X07H	07	A1A1A1	J04	02	1	50 T SEC
LTST	-S	2	A1A1A1	J07	11	A1A1A1	X07H	08	1	71 M
ROCK1	-F	4	A1A1A1	J10	01	A1A1A1	X14S	02	1	21 T PRI
ROCK1	-F	4	A1A1A1	J10	02	A1A1A1	X14S	07	1	15 T SEC
WTST	-S	1	A1A1A1	X04A	05	A1A1A1	X14S	11	1	172 M
WTST	-S	2	A1A1A1	X14S	11	A1A1A1	J06	10	2	61 M
WTST	-S	3	A1A1A1	J06	10	A1A1A1	X14S	10	1	60 M
GOO01	-G	1	A1A1A1	J02	04	A1A1A1	X04A	07	1	45 M

COMPOSITE WIRE LIST--ON PANEL

MAJOR REF. DES: A1A1A1

FROM--SIGNAL--TO

WRAP LEVEL

SIGNAL NAME WIRE NO MAJOR CODE MINOR--PIN MAJOR CODE MINOR--PIN WIRE LENGTH TYPE

ATST	-1	A1A1A1	J02	01	A1A1A1	X08A	02	1	67	T PRI
ATST	-2	A1A1A1	J02	02	A1A1A1	X08A	07	1	63	T SEC
ATST	-1	A1A1A1	X08A	02	A1A1A1	J10	03	2	145	T PRI
ATST	-1	A1A1A1	X08A	07	A1A1A1	J10	04	2	141	T SEC
ATST	-1	A1A1A1	J07	09	A1A1A1	J02	01	1	166	M
STST	-S	A1A1A1	X10A	10	A1A1A1	J10	05	1	141	T PRI
STST	-S	A1A1A1	X10A	07	A1A1A1	J10	06	1	133	T SEC
CLOCK	-S	A1A1A1	X14S	05	A1A1A1	X10A	08	1	136	M
CLOCK	-S	A1A1A1	X10A	09	A1A1A1	X04A	02	2	37	M
CLOCK	-S	A1A1A1	X04A	02	A1A1A1	J02	03	1	49	M
CTST	-S	A1A1A1	X14S	13	A1A1A1	X08A	05	1	152	M
CTST	-S	A1A1A1	X08A	03	A1A1A1	J02	08	2	73	M
DTST	-S	A1A1A1	X04C	04	A1A1A1	J02	06	1	34	M
ETST	-S	A1A1A1	X10A	13	A1A1A1	X04C	05	1	52	M
ETST	-S	A1A1A1	X04C	05	A1A1A1	J02	09	2	36	M
ITST	-S	A1A1A1	X08A	01	A1A1A1	X04A	11	1	20	M
ITST	-S	A1A1A1	X04A	11	A1A1A1	J02	10	2	57	M
JOE2COOP-S		A1A1A1	J12	01	A1A1A1	X14S	01	1	52	C PRI
JOE2COOP-S		A1A1A1	J12	02	A1A1A1	X14S	07	1	45	C SEC
JTCT	-S	A1A1A1	X07H	06	A1A1A1	X10A	08	1	73	M
KTST	-S	A1A1A1	X04A	08	A1A1A1	X07H	02	1	63	M
KTST	-S	A1A1A1	X07H	02	A1A1A1	X07H	09	2	7	M
KTST	-S	A1A1A1	X07H	09	A1A1A1	J07	10	1	73	M
LIP1	-S	A1A1A1	X10A	03	A1A1A1	J02	11	1	66	M
LIP2	-S	A1A1A1	X10A	05	A1A1A1	J04	03	1	124	M
LIP2	-S	A1A1A1	J04	03	A1A1A1	J06	11	2	72	M
LTST	-S	A1A1A1	X07H	08	A1A1A1	J04	01	1	52	T PRI
LTST	-S	A1A1A1	X07H	07	A1A1A1	J04	02	1	50	T SEC
LTST	-S	A1A1A1	J07	11	A1A1A1	X07H	08	1	71	M
ROCK1	-F	A1A1A1	J10	01	A1A1A1	X14S	02	1	21	T PRI
ROCK1	-F	A1A1A1	J10	02	A1A1A1	X14S	07	1	15	T SEC
WTST	-S	A1A1A1	X04A	05	A1A1A1	X14S	11	1	172	M
WTST	-S	A1A1A1	X14S	11	A1A1A1	J06	10	2	61	M
WTST	-S	A1A1A1	J06	10	A1A1A1	X14S	10	1	60	M
GOO01	-G	A1A1A1	J02	04	A1A1A1	X04A	07	1	45	M



COMPOSITE WIRE LIST--ON PANEL

MAJOR REF. DES: AIAIAI

FROM--SIGNAL--TO

WRAP

WIRE

SIGNAL NAME	WIRE NO.	MAJOR CODE	MINOR CODE	MINOR--PIN	WRAP LEVEL	LENGTH	WIRE TYPE			
ATST	-1	AIAIAI	J02	01	AIAIAI	X08A	02	1	67	T PRI
ATST	-1	AIAIAI	J02	02	AIAIAI	X08A	07	1	63	T SEC
ATST	-1	AIAIAI	X08A	02	AIAIAI	J10	03	2	145	T PRI
ATST	-1	AIAIAI	X08A	07	AIAIAI	J10	04	2	141	T SEC
ATST	-1	AIAIAI	J07	09	AIAIAI	J02	01	1	166	M
STST	-S	AIAIAI	X10A	10	AIAIAI	J10	05	1	141	T PRI
STST	-S	AIAIAI	X10A	07	AIAIAI	J10	06	1	133	T SEC
CLOCK	-S	AIAIAI	X14S	05	AIAIAI	X10A	08	1	136	M
CLOCK	-S	AIAIAI	X10A	09	AIAIAI	X04A	02	2	37	M
CLOCK	-S	AIAIAI	X04A	02	AIAIAI	J02	03	1	49	M
CTST	-S	AIAIAI	X14S	13	AIAIAI	X08A	05	1	152	M
CTST	-S	AIAIAI	X08A	03	AIAIAI	J02	08	2	73	M
DTST	-S	AIAIAI	X04C	04	AIAIAI	J02	06	1	34	M
ETST	-S	AIAIAI	X10A	13	AIAIAI	X04C	05	1	52	M
ETST	-S	AIAIAI	X04C	05	AIAIAI	J02	09	2	36	M
ITST	-S	AIAIAI	X08A	01	AIAIAI	X04A	11	1	20	M
ITST	-S	AIAIAI	X04A	11	AIAIAI	J02	10	2	57	M
JOE2COOP-S		AIAIAI	J12	01	AIAIAI	X14S	01	1	52	C PRI
JOE2COOP-S		AIAIAI	J12	02	AIAIAI	X14S	07	1	45	C SEC
JTCT	-S	AIAIAI	X07H	06	AIAIAI	X10A	08	1	73	M
KTST	-S	AIAIAI	X04A	08	AIAIAI	X07H	02	1	63	M
KTST	-S	AIAIAI	X07H	02	AIAIAI	X07H	09	2	7	M
KTST	-S	AIAIAI	X07H	09	AIAIAI	J07	10	1	73	M
LIP1	-S	AIAIAI	X10A	03	AIAIAI	J02	11	1	66	M
LTP2	-S	AIAIAI	X10A	05	AIAIAI	J04	03	1	124	M
LIP2	-S	AIAIAI	J04	03	AIAIAI	J06	11	2	72	M
LTST	-S	AIAIAI	X07H	08	AIAIAI	J04	01	1	52	T PRI
LTST	-S	AIAIAI	X07H	07	AIAIAI	J04	02	1	50	T SEC
LTST	-S	AIAIAI	J07	11	AIAIAI	X07H	08	1	71	M
ROCK1	-F	AIAIAI	J10	01	AIAIAI	X14S	02	1	21	T PRI
ROCK1	-F	AIAIAI	J10	02	AIAIAI	X14S	07	1	15	T SEC
WTST	-S	AIAIAI	X04A	05	AIAIAI	X14S	11	1	172	M
WTST	-S	AIAIAI	X14S	11	AIAIAI	J06	10	2	61	M
WTST	-S	AIAIAI	J06	10	AIAIAI	X14S	10	1	60	M
GOO01	-G	AIAIAI	J02	04	AIAIAI	X04A	07	1	45	M

# COMPOSITE WIRE LIST--ON PANEL

MAJOR REF. DES: AIAIAI

FROM--SIGNAL--TO

WRAP

WIRE

SIGNAL NAME	WIRE NO.	MAJOR CODE	MINOR CODE	MINOR--PIN	LEVEL	LENGTH	TYPE			
ATST	-1	AIAIAI	J02	01	AIAIAI	X08A	02	1	67	T PRI
ATST	-1	AIAIAI	J02	02	AIAIAI	X08A	07	1	63	T SEC
ATST	-1	AIAIAI	X08A	02	AIAIAI	J10	03	2	145	T PRI
ATST	-1	AIAIAI	X08A	07	AIAIAI	J10	04	2	141	T SEC
ATST	-1	AIAIAI	J07	09	AIAIAI	J02	01	1	166	M
STST	-S	AIAIAI	X10A	10	AIAIAI	J10	05	1	141	T PRI
STST	-S	AIAIAI	X10A	07	AIAIAI	J10	06	1	133	T SEC
CLOCK	-S	AIAIAI	X14S	05	AIAIAI	X10A	08	1	136	M
CLOCK	-S	AIAIAI	X10A	09	AIAIAI	X04A	02	2	37	M
CLOCK	-S	AIAIAI	X04A	02	AIAIAI	J02	03	1	49	M
CTST	-S	AIAIAI	X14S	13	AIAIAI	X08A	05	1	152	M
CTST	-S	AIAIAI	X08A	03	AIAIAI	J02	08	2	73	M
DTST	-S	AIAIAI	X04C	04	AIAIAI	J02	06	1	34	M
ETST	-S	AIAIAI	X10A	13	AIAIAI	X04C	05	1	52	M
ETST	-S	AIAIAI	X04C	05	AIAIAI	J02	09	2	36	M
ITST	-S	AIAIAI	X08A	01	AIAIAI	X04A	11	1	20	M
ITST	-S	AIAIAI	X04A	11	AIAIAI	J02	10	2	57	M
JOE2COOP-S		AIAIAI	J12	01	AIAIAI	X14S	01	1	52	C PRI
JOE2COOP-S		AIAIAI	J12	02	AIAIAI	X14S	07	1	45	C SEC
JTCT	-S	AIAIAI	X07H	06	AIAIAI	X10A	08	1	73	M
KTST	-S	AIAIAI	X04A	08	AIAIAI	X07H	02	1	63	M
KTST	-S	AIAIAI	X07H	02	AIAIAI	X07H	09	2	7	M
KTST	-S	AIAIAI	X07H	09	AIAIAI	J07	10	1	73	M
LIP1	-S	AIAIAI	X10A	03	AIAIAI	J02	11	1	66	M
LTP2	-S	AIAIAI	X10A	05	AIAIAI	J04	03	1	124	M
LIP2	-S	AIAIAI	J04	03	AIAIAI	J06	11	2	72	M
LTST	-S	AIAIAI	X07H	08	AIAIAI	J04	01	1	52	T PRI
LTST	-S	AIAIAI	X07H	07	AIAIAI	J04	02	1	50	T SEC
LTST	-S	AIAIAI	J07	11	AIAIAI	X07H	08	1	71	M
ROCK1	-F	AIAIAI	J10	01	AIAIAI	X14S	02	1	21	T PRI
ROCK1	-F	AIAIAI	J10	02	AIAIAI	X14S	07	1	15	T SEC
WTST	-S	AIAIAI	X04A	05	AIAIAI	X14S	11	1	172	M
WTST	-S	AIAIAI	X14S	11	AIAIAI	J06	10	2	61	M
WTST	-S	AIAIAI	J06	10	AIAIAI	X14S	10	1	60	M
GOO01	-G	AIAIAI	J02	04	AIAIAI	X04A	07	1	45	M